



SAFE AND CONNECTED



NDOT E244 NEW EQUIPMENT ENVIRONMENTAL PROGRAM



- **FY 2016 Request**





Request Transportation Board Approval to purchase Environmental Program fleet vehicles

NRS 408.389 states that the Department shall not purchase any equipment which exceeds \$50,000, unless the purchase is first approved by the Transportation Board.

The total purchase of these vehicles is approximately \$4,919,000 to \$5,324,222 from FY 2016.



Approved Biennial Legislative Budget

NEVADA DEPARTMENT OF TRANSPORTATION
BUDGET ACCOUNT 201-4660
BUDGET REQUEST FISCAL YEARS 2015-2016 AND 2016-2017
E244 - ENVIRONMENTAL PROGRAM

GOVERNOR REQUEST
APRIL 09, 2015

As required by the Budget Instructions, expenses associated with a new program are included as an enhancement. This decision unit is requesting budget authority for personnel, operational equipment and supplies, and several specialized equipment items, all of which are detailed separately and are summarized below by object code.

| | | | |
|-----------------------------|----------------------------|--------------|--------------|
| REVENUE - CATEGORY 00 | | | |
| 00-2507 | Highway Fund Authorization | \$ 9,322,352 | \$ 6,379,840 |
| TOTAL REVENUE - CATEGORY 00 | | \$ 9,322,352 | \$ 6,379,840 |

EXPENDITURES:

| | 2016 | 2017 | | |
|---|---------------------|---------------------|--------------|--------------|
| 01-5000 PERSONNEL | \$ 3,955,814 | \$ 4,052,249 | | |
| 03-6200 TRAVEL | \$ 21,500 | \$ 21,500 | | |
| 04-7000 OPERATING-EMPLOYEE BOND & AG ASSESSMENT | \$ 6,895 | \$ 6,890 | | |
| 26-7556 INFORMATION SERVICES | \$ 13,921 | \$ 14,201 | | |
| | <u>\$ 3,998,130</u> | <u>\$ 4,094,840</u> | | |
| 05-8280 MATERIAL / ENVIRONMENTAL EQUIPMENT | | | | |
| PM-10 SWEEPERS (three each crew) | \$ 2,700,000 | \$ - | | |
| CULVERT FLUSHER TRUCKS | \$ 1,290,000 | \$ 1,290,000 | | |
| RADIO CONTROLLED TRACK LOADERS | \$ 300,000 | \$ - | | |
| CAMERA TRUCKS | \$ - | \$ 495,000 | | |
| CREW TRUCKS | \$ 1,034,222 | \$ 500,000 | | |
| | <u>\$ 5,324,222</u> | <u>\$ 2,285,000</u> | | |
| Environmental Program Total | <u>\$ 9,322,352</u> | <u>\$ 6,379,840</u> | \$ 9,322,352 | \$ 6,379,840 |
| ENHANCEMENT - ENVIRONMENTAL PROGRAM - E244 | | | \$ 9,322,352 | \$ 6,379,840 |

Attachment 1

E244 ENVIRONMENTAL PROGRAM
PAGE 1 OF 1



NEW NDOT VEHICLES

Attachment 2

FY 2016 Enviromental Program Equipment

| CLASS | DESCRIPTION | Fuel Type | LOCATION | EST. COST | Group Cumm Cost | Total Cumm Cost |
|-------|---------------------------------------|-----------|------------|-----------|--------------------|--------------------|
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 1 | \$300,000 | \$300,000 | \$300,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 1 | \$300,000 | \$600,000 | \$600,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 1 | \$300,000 | \$900,000 | \$900,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 2 | \$300,000 | \$1,200,000 | \$1,200,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 2 | \$300,000 | \$1,500,000 | \$1,500,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 2 | \$300,000 | \$1,800,000 | \$1,800,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 3 | \$300,000 | \$2,100,000 | \$2,100,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 3 | \$300,000 | \$2,400,000 | \$2,400,000 |
| 24 | PM-10 self Propelled Street Sweeper | Dsl | District 3 | \$300,000 | \$2,700,000 | \$2,700,000 |
| 20 | Culvert Cleaner Truck (Vactor 2100PD) | Dsl | District 1 | \$430,000 | \$430,000 | \$3,130,000 |
| 20 | Culvert Cleaner Truck (Vactor 2100PD) | Dsl | District 2 | \$430,000 | \$860,000 | \$3,560,000 |
| 20 | Culvert Cleaner Truck (Vactor 2100PD) | Dsl | District 3 | \$430,000 | \$1,290,000 | \$3,990,000 |
| 55 | Remote Controlled Track Loader | | District 1 | \$100,000 | \$100,000 | \$4,090,000 |
| 55 | Remote Controlled Track Loader | | District 2 | \$100,000 | \$200,000 | \$4,190,000 |
| 55 | Remote Controlled Track Loader | | District 3 | \$100,000 | \$300,000 | \$4,290,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 1 | \$26,000 | \$26,000 | \$4,316,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 1 | \$26,000 | \$52,000 | \$4,342,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 1 | \$26,000 | \$78,000 | \$4,368,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 1 | \$26,000 | \$104,000 | \$4,394,000 |
| 05 | 1/2 Ton 4x4 Crew Cab PU | Unl | District 1 | \$29,000 | \$133,000 | \$4,423,000 |
| 05 | 1/2 Ton 4x4 Crew Cab PU | Unl | District 1 | \$29,000 | \$162,000 | \$4,452,000 |
| 10 | 1 Ton Crew Truck Flat Bed | Dsl | District 1 | \$55,000 | \$217,000 | \$4,507,000 |
| 10 | 1 Ton Crew Truck Flat Bed | Dsl | District 1 | \$55,000 | \$272,000 | \$4,562,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 2 | \$26,000 | \$298,000 | \$4,533,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 2 | \$26,000 | \$324,000 | \$4,559,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 2 | \$26,000 | \$350,000 | \$4,585,000 |
| 10 | 1 Ton Crew Truck Flat Bed | Dsl | District 2 | \$55,000 | \$405,000 | \$4,640,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | District 3 | \$26,000 | \$431,000 | \$4,666,000 |
| 05 | 1/2 Ton 4x4 Crew Cab PU | Unl | District 3 | \$29,000 | \$460,000 | \$4,695,000 |
| 05 | 1/2 Ton 4x4 Crew Cab PU | Unl | District 3 | \$29,000 | \$489,000 | \$4,724,000 |
| 10 | 1 Ton Crew Truck Flat Bed | Dsl | District 3 | \$55,000 | \$544,000 | \$4,779,000 |
| 01 | 4 Door Sedan | Unl | HQ | \$18,000 | \$562,000 | \$4,797,000 |
| 01 | 4 Door Sedan | Unl | HQ | \$18,000 | \$580,000 | \$4,815,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | HQ | \$26,000 | \$606,000 | \$4,841,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | HQ | \$26,000 | \$632,000 | \$4,867,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | HQ/Dist | \$26,000 | \$658,000 | \$4,893,000 |
| 05 | 1/2 Ton 4x4 Ext Cab PU | Unl | HQ/Dist | \$26,000 | \$684,000 | \$4,919,000 |



9 - SWEEPERS



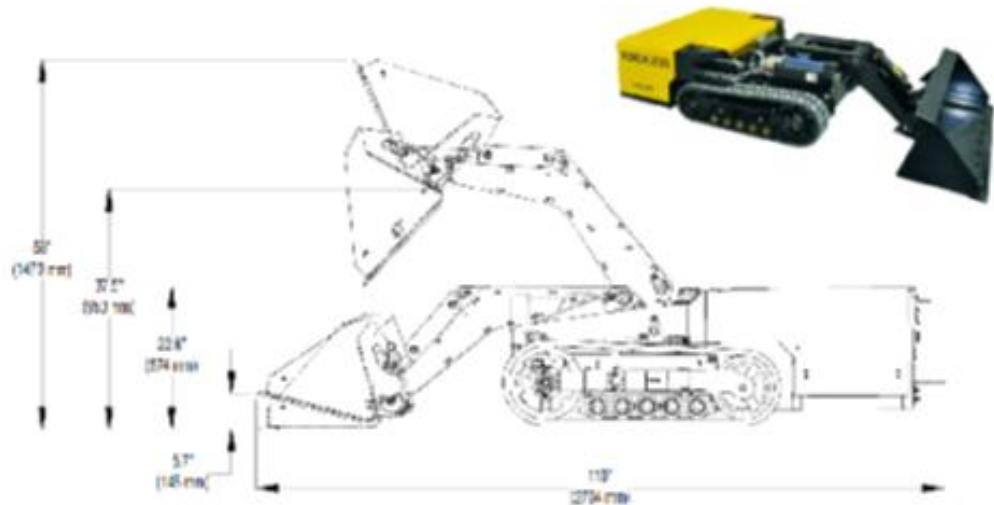


3 – Culvert Cleaner Truck





3 - REMOTE CONTROLLED TRACK LOADER





22 – LIGHT VEHICLES





Date: 7/22/2019

FUNDING: FY 2016 Equipment - Category 05

NDOT EQUIPMENT COSTS - STRAIGHT-LINE DEPRECIATION FOR 8 YEARS AND ESTIMATED MAINTENANCE COSTS :

Note:

Average Cost per Hour = \$56

COSTS FOR LEASING THE EQUIPMENT TO DO THE SAME TASK PLUS NDOT MAINTENANCE COST:

Average Cost per Hour = \$61

COSTS FOR CONTRACTING OUT THE TASK:

Note: Without long term contract to cover initial equipment costs, equipment rate used may be low.

Average Cost per Hour = \$72

Date: 7/22/2015

FUNDING: FY 2016 Equipment - Category 05

NDOT EQUIPMENT COSTS - STRAIGHT-LINE DEPRECIATION FOR 8 YEARS AND ESTIMATED MAINTENANCE COSTS :

Notes

Average Cost per Hour = \$156

COSTS FOR LEASING THE EQUIPMENT TO DO THE SAME TASK PLUS NDOT MAINTENANCE COST

Note: Rate is based on current rental in D2

Average Cost per Hour = \$260

COSTS FOR CONTRACTING OUT THE TASK:

Note: Without long term contract to cover initial equipment costs, equipment rate used may be to low

Average Cost per Hour = \$285

Attachment 3 – COST AND BENEFITS ANALYSIS

ATTACHMENT 3

NDOT MOBILE EQUIPMENT PURCHASE REQUEST - COSTS AND BENEFITS ANALYSIS

| Equipment | Quantity | Price | Total Costs |
|--|-----------|------------|-------------|
| Class 24 PM-10 Compliant Sweepers Total Purchase Price | 1 Sweeper | \$ 296,000 | \$ 296,000 |

- (1) Costs for Purchasing Equipment, Operating and Maintaining**

NDOT COSTS FOR THE SWEEPING TASK PER YEAR:

Task: Clark County Street Sweeping with PM-10 Compliant Sweepers

| Item | Description | Quantity | Rate | Total Costs |
|------|---|----------|--------------|-------------------|
| 1 | Equipment Cost per Year | 1 | Sweeper | \$ 42,988 |
| | Other Equipment used for the Task (Impact attenuator, garbage truck, etc.) | | | \$ 23,751 |
| 2 | All Maintenance, Insurance, and Fuel Costs | | | \$ 27,862 |
| 3 | Labor Costs related to the Task | | | \$ 22,845 |
| 4 | Department Labor Overhead | | 67.28% | \$ 15,376 |
| 5 | Materials Disposal for the Task | | | \$ 23,055 |
| | | | Total | \$ 155,877 |

Note: MMS = Maintenance Management System

4771 Curb Miles/Unit

Average Cost per Curb Mile = \$ 33

- (2) Costs for Leasing, Operating and Maintaining**

COSTS FOR LEASING THE EQUIPMENT TO DO THE SAME TASK:

| Item | Description | Quantity | Rate | Total Costs |
|------|--|-----------|--------------|-----------------|
| 1 | PM-10 Compliant Street Sweepers | 1 Sweeper | \$ 144,000 | \$ 144,000 |
| | (Annual lease rate includes all maintenance & insurance costs) | | | |
| | Other Equipment used for the Task | | | \$ 23,750 |
| | (Impact attenuator, garbage truck, etc.) | | | |
| 2 | Fuel Cost | | | \$ 3,699 |
| 3 | Labor Costs Related to the Task | | | \$ 22,845 |
| 5 | Department Labor Overhead | | 67.28% | \$ 15,376 |
| 6 | Materials Disposal for the Task | | | \$ 23,052 |
| | | | Total | \$22,200 |

Average Cost per Curb Mile = \$ 49

- (3) Costs for contracting for the performance of the work which would have been performed using the mobile equipment

COSTS FOR CONTRACTING OUT THE TASK:

| Item | Description | Quantity | Rate | Total Costs |
|------|---|-----------------|----------|-------------|
| 1 | All Inclusive Street Sweeping (NDOT District 2 freeway contract) | 4771 Curb Miles | \$ 59.25 | \$ 282,675 |
| 2 | Department Contract Administration: | | | |
| | Procurement and Contract Management (Project Mgr.) | 200 Man Hours | \$ 40 | \$ 8,000 |
| | Payables Management (Admin. III) | 24 Man Hours | \$ 22 | \$ 528 |
| | Quality Management | 104 Man Hours | \$ 25 | \$ 2,600 |
| 3 | Department Labor Overhead | | 67.28% | \$ 7,487 |
| | | | Total | \$ 801,290 |

Average Cost per Curb Mile = \$ 63

ATTACHMENT 3
NDOT MOBILE EQUIPMENT PURCHASE REQUEST - COSTS AND BENEFITS ANALYSIS

Date: 7/22/2015

| Equipment | Quantity | Price | Total Costs |
|--|----------|--------------|--------------|
| Remote Controlled Mini Loader (class 55) | 3 Units | \$100,000.00 | \$300,000.00 |

FUNDING: FY 2016 Equipment - Category 05

- (1) Costs for Purchasing Equipment, Operating and Maintaining**

NDOT EQUIPMENT COSTS - STRAIGHT-LINE DEPRECIATION FOR 8 YEARS AND ESTIMATED MAINTENANCE COSTS

Task: Operate Mini Loader

[illegible]

Notes:

Average Cost per Hour = \$148

- (2) Costs for Leasing, Operating and Maintaining**

COSTS FOR LEASING THE EQUIPMENT TO DO THE SAME TASK PLUS NDOT MAINTENANCE COST

[illegible]

Note: Lease of this type on unit is unlikely

Average Cost per Hour = \$284

- (3) Costs for contracting for the performance of the work which would have been performed using the mobile equipment

COSTS FOR CONTRACTING OUT THE TASK:

[illegible]

Note: Without long term contract to cover initial equipment costs, equipment rate used may be to low

Average Cost per Hour = \$408



QUESTIONS ?

